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Relaxation Techniques for Advancing Women-Centered Childbirth Care

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A B S T R A C T

Background: Contemporary maternity care emphasizes not only maternal and neonatal safety but also the quality of women's childbirth experiences. However, increasing medicalization of labor has been associated with diminished maternal autonomy, heightened anxiety, and negative birth experiences. Women-Centered Care (WCC) offers a midwifery-led approach that prioritizes respect, empowerment, partnership, and individualized care. Within this framework, relaxation techniques serve as non-pharmacological strategies to support physiological labor and enhance maternal wellbeing.

Objective: This narrative review aims to examine current evidence on relaxation techniques used during labor and their role in reducing pain and anxiety while promoting positive childbirth experiences in alignment with women-centered care principles.

Methods: A narrative review of recent literature was conducted using PubMed, Wiley, Cochrane Library, and Google Scholar. Studies published within the last five years were included without restrictions on study design, focusing on relaxation techniques applied during intrapartum care.

Results: The findings indicate that various relaxation techniques—including breathing exercises, manual techniques, music therapy, aromatherapy, and hydrotherapy—are effective in alleviating labor pain and anxiety. These interventions support neuroendocrine processes essential for physiological labor, enhance women's sense of control, and improve overall childbirth satisfaction. Relaxation techniques also reinforce key

components of WCC by fostering autonomy, comfort, and active participation in the birthing process.
Conclusion: Relaxation techniques are effective, safe, and feasible interventions that support the implementation of women-centered childbirth care. Their integration into intrapartum midwifery practice can enhance maternal wellbeing, promote positive birth experiences, and strengthen respectful and holistic maternity care.

I. INTRODUCTION

The 3rd sustainable development goals (SDG's) are to ensure healthy lives and promote well-being for all. According to this global agenda in 2016 – 2030, focus of maternity care now is not only about survive labour without complication or decreasing of maternal mortality rate, but also to make sure a quality of experiences during labour (WHO, 2018). But, in the last two decades, there are increasing of medicalization in labour, increasing of intervention, acceleration and termination without any clear indication. All of this undermine woman's own capability in the labour process and provide negative childbirth experiences outcome (Roqueta-Vall-llosera et al., 2024; WHO, 2018). This also eliminates the meaning that childbirth is actually a normal or psysiological process. Negative childbirth experience then becomes a postpartum mental health issue (Märthesheimer et al., 2025). There is a significant relationship between a negative birth experience and the level of anxiety and depression in the mother (Ahmadpour et al., 2023). During labour, physical and psychological changes occur in the mother. One of the things that causes discomfort in the birthing process is severe pain (S. Huang et al., 2024). One of the reason of Worries about Childbirth (WaC) in women are birth pain and artificial pain (Kaçar et al., 2024).

The modern midwifery paradigm is shifting from a risk-oriented approach toward a midwifery model of care that emphasizes continuity of care—that is equitable, person-centred, respectful, integrated, and of high quality—delivered either independently by midwives or collaboratively with interdisciplinary health teams (WHO, 2024). Therefore, the new model of care in childbirth called ***women centred care***, with key principles are autonomy and choice, empowerment, partnership, individual unique needs of the woman, respect, holism – includes cultural, social, and spiritual care (Brady et al., 2024).

One of the coping methods or preparations needed is relaxation techniques during the birthing process (Tabaghdehi et al., 2020). Labour pain highlights the importance of providing adequate pain management during childbirth (Easton et al., 2023). Relaxation techniques during labor are one of the non-pharmacological pain relief methods midwives can employ. These non-pharmacological techniques have been shown to increase maternal satisfaction during labor and promote a positive childbirth experience (Homayi et al., 2021). Some relaxation techniques that can be done during labour are breathing exercises, yoga, music, hypnosis, mindfulness, etc (Easton et al., 2023).

The aim of this narrative review is to explore and summarize current evidence on relaxation techniques during labor, highlighting their effectiveness in reducing pain, alleviating anxiety, and promoting overall maternal and fetal well-being, with a focus on supporting woman-centered childbirth care.

II. METHODS

This narrative review synthesizes theoretical and empirical literature on relaxation techniques in labor within the context of woman-centered care. Relevant studies were identified through searches of PubMed, Wiley, Cochrane Library, and Google Scholar (as grey literature), focusing on publications from the past five years without restrictions on study design.

III. DISCUSSION

Woman-Centred Care (WCC) in Midwifery and Childbirth

There is need of a structured approach to service delivery that defines care processes, provider organization, and service management, supported by clear identification of roles and responsibilities across care pathways named models of care. In midwifery services, the models of care are aligned with the midwifery philosophy of care, which are a person-centred care, values women-midwife as partners, optimizes physiological, biological, psychological, social and cultural process, and just only use intervention when needed (WHO, 2024).

The concept of Woman-Centered Care (WCC) is a derivative of person-centered care (PCC), which represents a paradigm shift in midwifery services. In short, WCC is a midwifery service that implements a partnership between woman and midwife (Gregory et al., 2025). The WCC concept reflects the philosophy of midwifery care (ICM, 2025b).

A positive childbirth experience is defined as a woman's perception of the interactions and events surrounding her childbirth that make her feel cared for, empowered, secure, and respected. Such an experience can evoke feelings of happiness, confidence, and achievement, and may bring both immediate and lasting benefits to her psychological and social well-being.

This inclusive, woman-centred perspective emphasizes the crucial role of healthcare providers in fostering supportive, respectful, and safe care during childbirth. By focusing on support, control, safety, and respect, this definition provides a framework for recognizing and validating positive childbirth experiences, as well as guiding improvements in clinical practice, education, research, advocacy, and policy development (Leinweber et al., 2023).

Physiological stress, Pain and The Role of Relaxation

Physiological and psychological stress experienced during childbirth may adversely affect labour progression (Walter et al., 2021). Pain during labour stated as one of the most severe physical pains experienced by women (Easton et al., 2023). On of the main concerns experienced by pregnant women is how to manage labor pain (Kaçar et al., 2024).

One of the main triggers of anxiety is fear of the childbirth process, which is most commonly experienced by primiparous pregnant women, accounting for approximately 70% of the global pregnant population. Excessive anxiety during pregnancy and childbirth can adversely affect maternal and fetal health (Fazeli et al., 2020; Tan et al., 2021). Evidence indicates that stress-induced hormonal responses, particularly *cortisol release*, substantially affect all aspects of the childbirth process. Stress caused by disturbances during childbirth can *inhibit oxytocin release* through opioid mechanisms, leading to weaker uterine contractions and slowing the progress of labor (Walter et al., 2021).

The nature of pain varies throughout the stages of labor. In the first stage, pain is mainly visceral and arises from stimulation of the cervix, uterus, adnexa, and pelvic ligaments. As labor advances to the late first stage to the early second stage, stretching and pulling of the pelvic organs become the main sources of pain. This pain is typically severe, sharp, and

concentrated in the perineum, anus, lower sacral area, thighs, and lower legs. In the second stage of labor, as the fetus descends, pain is primarily caused by the distension of the perineal tissues (Easton et al., 2023).

Labour pain highlights the importance of providing adequate pain management during childbirth (Easton et al., 2023). Findings indicate that women's satisfaction with childbirth is greatly shaped by their sense of control, which is influenced by adequate preparation, effective coping, and supportive care. One of the coping methods or preparations needed is relaxation techniques during the birthing process (Tabaghdehi et al., 2020). Relaxation techniques during labor are one of the non-pharmacological pain relief methods midwives can employ. These non-pharmacological techniques have been shown to increase maternal satisfaction during labor and promote a positive childbirth experience (Homayi et al., 2021). Some relaxation techniques that can be done during labour are breathing exercises, music, massage, hypnosis, mindfulness, etc (Easton et al., 2023).

Relaxation Techniques in Childbirth Care

Relaxation techniques include various interventions designed to calm the body, lower blood pressure, and slow breathing, thereby promoting a feeling of improved wellbeing. A number of different relaxation methods have been examined in research (Easton et al., 2023).

- **Breathing techniques**

  In a systematic review conducted by Leutenegger et al. (2022) , various types of breathing techniques have been investigated for reducing labor pain. These techniques include mindfulness breathing, directed breathing, and breathing exercises for meditation. Fundamentally, they involve cleansing breathing, slow rhythmic breathing, shallow breathing, passive relaxation, modified breath-holding techniques, and pelvic floor exercises. These approaches were shown to help mothers manage labor pain while supporting significant maternal and fetal well-being.

  The most basic breathing technique during labor consists of slow nasal inhalation for two seconds followed by controlled exhalation for two seconds during contractions, with brief rests of 1–3 seconds, repeated for five minutes. (Baljon et al., 2020) .

  There's also the Lamaze breathing relaxation technique. This procedure involves teaching breathing and relaxation techniques divided into three sequential phases according to the intensity and duration of labor pain and contractions. The first phase involves regular breathing by inhaling deeply through the nose, pausing for five seconds, and exhaling slowly through the mouth. The second phase uses shallow, rapid mouth breathing as pain and contractions increase in intensity during active labor. The third phase involves inhaling and exhaling deeply through the mouth combined with pushing efforts. This technique has been proven to significantly reduce labor pain and improve labor outcomes (Adhikari & Devi, 2022).

- **Manual techniques**

  Manual techniques, including massage, Progressive muscle relaxation (PMR), reflexology, shiatsu, and the use of warm or cold packs, involve various forms of soft tissue manipulation applied to areas such as the back, abdomen, or perineum (Easton et al., 2023). Mothers who received warm packs experienced reduced labor pain and improved emotional comfort.

  Progressive Muscle Relaxation (PMR) is based on the principle that anxiety and stress manifest as muscle tension, which can be relieved by systematically tensing and then relaxing specific muscle groups. Combined with deep breathing exercises, PMR has been

shown to promote relaxation and can effectively shorten the duration of labor by facilitating cervical dilation in vaginal delivery (Nasution et al., 2020).

- **Music therapy & aromatherapy**

  Mothers exposed to classical music during labor experienced significantly lower levels of latent pain ($p = .005$), active pain ($p < .001$), and transition-phase pain ($p < .001$) compared to the control group. The use of music therapy during labor not only reduced pain but also enhanced the overall childbirth experience. Therefore, music therapy can be recommended as a safe, non-pharmacological, and easily implemented for laboring women (An et al., 2023).

  Mothers who listened to the "Musical Journey through Pregnancy" playlist experienced significantly less labor pain compared to the control group when cervical dilation was between 4 and 7 cm, specifically, during 4–5 cm dilation ($p < 0.001$). These results indicate that music therapy can effectively reduce labor pain (Paoin et al., 2023).

  Aromatherapy using Ginger Essential Oil (GEO) has been shown to reduce labor pain. In addition to GEO, inhalation of 250 μL of *Citrus sinensis* essential oil significantly decreased pain intensity over time and also reduced anxiety ($p < 0.0001$), with a notable positive correlation with pain intensity ($r = 0.3147$; $p = 0.3129$) (Nascimento et al., 2025; Paoin et al., 2023). Aromatherapy works by sending signals to the olfactory system, which stimulate the brain to release neurotransmitters such as serotonin and dopamine (Nourimonfared et al., 2022; Yulizawati et al., 2025).

- **Water immersion / hydrotherapy**

  Hydrotherapy during the initial stage of labor is correlated with a positive perception of birth and higher levels of β-endorphin in milk (Bedir Fındık et al., 2025). Local hydrotherapy can relieve pain, enhance privacy and dignity during labor, and improve overall comfort without affecting epidural effectiveness. However, its implementation should consider the importance of individualized care and comprehensive antenatal education to support informed decision-making (L. Huang et al., 2025). A case-control study by Aksakal et al. (2022) involving 337 laboring women who received hydrotherapy found that, although hydrotherapy did not affect postpartum depression, it may help reduce pain during labor.

  Hydrotherapy can be administered using either a therapeutic shower or a bathtub. A study by Mellado-García et al. (2024) involving 124 laboring women divided into two groups—those using a therapeutic shower and those using a bathtub—found that both interventions were effective in relieving labor pain and reducing total labor duration ($p = .004$). The bathtub, however, was associated with a greater reduction in pain intensity ($p = 0.003$).

IV. CONCLUSION

Relaxation techniques play a significant role in supporting the realization of Women-Centered Care (WCC) in intrapartum midwifery services. Evidence from recent literature indicates that these non-pharmacological interventions effectively reduce labor pain and anxiety, facilitate physiological labor processes, and enhance women's sense of control, comfort, and emotional wellbeing during childbirth.

By addressing both the physiological and psychological dimensions of labor, relaxation techniques align closely with the core principles of WCC, including respect for women's autonomy, empowerment, individualized care, and partnership between women and midwives. Techniques such as breathing exercises, manual therapies, music

therapy, aromatherapy, and hydrotherapy are not only effective but also accessible and adaptable across diverse birth settings.

Integrating relaxation techniques into routine intrapartum care strengthens midwifery-led models of care and contributes to more positive childbirth experiences. Therefore, midwives should be encouraged to incorporate these approaches into clinical practice, supported by adequate training and antenatal education, to promote holistic, respectful, and women-centered childbirth care.

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